AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please add the following new paragraphs after the third full paragraph on page 6 beginning at line 21.

Also, according to the present invention, there is provided a method for controlling a salient-pole DC brushless motor having armatures in three phases, an apparatus for controlling the DC brushless motor comprising voltage applying means for applying drive voltages to the armatures, high-frequency adding means for adding high-frequency voltages to the drive voltages, first current detecting means for detecting a current flowing through an armature in a first phase of the armatures in the three phases, second current detecting means for detecting a current flowing through an armature in a second phase of the armatures in the three phases, and reference value extracting means for extracting a sine reference value depending on the sine value of a twofold angle which is twice a rotor angle of the motor and a cosine reference value depending on the cosine value of the twofold angle, using a first current value detected by the first current detecting means and a second current value detected by the second current detecting means when the high-frequency voltages are added to the drive voltages by the high-frequency adding means, and high-frequency components depending on the high-frequency voltages, rotor angle calculating means for calculating a rotor angle of the motor using the sine reference value and the cosine reference value, and three-phase/dq converting means for handling the motor as an equivalent circuit having a q-axis armature disposed on a q-axis in the direction of magnetic fluxes from a rotor of the motor and a d-axis armature disposed on a d-axis which is

perpendicular to the q-axis, and calculating a detected q-axis current flowing through the q-axis armature and a detected d-axis current flowing through the d-axis armature based on the rotor angle of the motor which is calculated by the rotor angle calculating means, the first current value, and the second current value.

Moreover, the method for controlling the DC brushless motor comprises the step of determining the drive voltages in order to eliminate a q-axis current difference which is the difference between the detected q-axis current and a predetermined q-axis command current and a d-axis current difference which is the difference between the detected d-axis current and a predetermined d-axis command current, performing a magnetic pole determination process for detecting the orientation of the magnetic poles of the rotor based on a magnetic pole reference value calculated by a predetermined calculating process, depending on the sine reference value and the cosine reference value which are extracted by the reference value extracting means when the q-axis command value is set to a predetermined magnetic pole detecting current, and performing a proportional plus integral process on the difference between the detected q-axis current and the q-axis command current to calculate the q-axis current difference and also performing a proportional plus integral process on the difference between the detected d-axis current and the d-axis command current to calculate the d-axis current difference when the magnetic pole detecting process is not performed, and performing an integral process only on the difference between the detected q-axis current and the q-axis command current to calculate the q-axis current difference and also performing an integral process only on the difference between the detected d-axis current and the

<u>d-axis command current to calculate the d-axis current difference when the magnetic</u>

<u>pole detecting process is performed.</u>

<u>With the above arrangement, the time spent after the q-axis command current is</u>

<u>set to the magnetic pole detecting current until currents depending on the magnetic pole</u>

<u>detecting current are detected by the first current detecting means and the second</u>

<u>current detecting means. Therefore, the time required until the sine reference value and</u>

<u>the cosine reference value depending on the magnetic pole detecting current and the</u>

<u>magnetic pole reference value calculated depending on the magnetic pole detecting</u>

<u>current are obtained.</u>

<u>Accordingly, the time required to detect the orientation of the magnetic poles of</u>

<u>the rotor of the motor based on the magnetic pole reference value according to the</u>

<u>magnetic pole detecting process is shortened and thus the current flowing in the</u>

<u>armature can be controlled.</u>

Please amend the paragraph bridging pages 6 and 7 as follows:

<u>The apparatus and method for controlling a salient-pole DC brushless motor</u>

<u>according to the present invention</u> ~~The magnetic pole detecting means~~ sets a first

magnetic pole detecting current and a second magnetic pole detecting current which is

opposite in direction to the first magnetic pole detecting current as the magnetic pole

detecting current, and detects the orientation of the magnetic poles of the rotor based

on the difference between a first magnetic pole reference value calculated by the

predetermined calculating process depending on the sine reference value and the

cosine reference value which are extracted by the reference value extracting means

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when the first magnetic pole detecting current is set, and a second magnetic pole reference value calculated by the predetermined calculating process depending on the sine reference value and the cosine reference value which are extracted by the reference value extracting means when the second magnetic pole detecting current is set.

Please amend the first full paragraph on page 7 beginning at line 11 as follows:

With the above arrangement, as described in detail later on, the sign of the difference between the first magnetic pole reference value calculated when the first magnetic pole detecting current is set as the magnetic pole detecting current and the second magnetic pole reference value calculated when the second magnetic pole detecting current is set as the magnetic pole detecting current is inverted depending on the orientation of the magnetic poles of the rotor.   Therefore, the magnetic pole detecting means can detect the orientation of the magnetic poles of the rotor can be detected based on the difference between the first magnetic pole reference value and the second magnetic pole reference value.